

ABSTRACT OF THE DISCLOSURE

In a wavelength-division multiplexing system with an OADM mounted, part of the chromatic dispersion on a transmission line is compensated for by a chromatic dispersion compensator for dropped wavelength that is provided in the wavelength-division multiplexing system, and the other part of the chromatic dispersion is compensated for by a chromatic dispersion compensator for added wavelength that is similarly provided in the wavelength-division multiplexing system. Thus, the chromatic dispersion compensator for dropped wavelength acts on the signal dropped by the OADM, and the chromatic dispersion compensator for added wavelength acts on the added signal. Both the chromatic dispersion compensators act on the passing signal. With the chromatic dispersion compensators being mounted in the optical transmission apparatus before the system is upgraded, it is not necessary to alter the chromatic dispersion compensating method and the variation of the communication quality can be suppressed.